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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/888,943	06/25/2001	William A. Mittelstadt	56842USA4A.002	9282
32692	7590 07/14/2005		EXAMINER	
3M INNOV	ATIVE PROPERTIES	PATEL, NIHIR B		
PO BOX 33427 ST. PAUL, MN 55133-3427			ART UNIT	PAPER NUMBER
511110 <i>2</i> ,			3743	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

•				Fath			
	Applicati	on No.	Applicant(s)	•			
Office Action Commons	09/888,9	43	MITTELSTADT ET	AL.			
Office Action Summary	Examine	r	Art Unit				
	Nihir Pate		3743				
The MAILING DATE of this communic Period for Reply	ation appears on th	e cover sheet with the c	orrespondence add	dress			
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commun - If the period for reply specified above is less than thirty (30) - If NO period for reply is specified above, the maximum statu- - Failure to reply within the set or extended period for reply w Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).	ATION. 37 CFR 1.136(a). In no evication. days, a reply within the statory period will apply and will, by statute, cause the app	rent, however, may a reply be tim tutory minimum of thirty (30) days rill expire SIX (6) MONTHS from blication to become ABANDONEI	nely filed s will be considered timely the mailing date of this co D (35 U.S.C. § 133).				
Status		•					
1) Responsive to communication(s) filed	on May 12 th , 2005.						
,	<u> </u>	☑ This action is non-final.					
3) Since this application is in condition for	<i>'</i> —		secution as to the	merits is			
closed in accordance with the practice							
Disposition of Claims		·					
4) Claim(s) is/are pending in the	application.						
,	above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>15-27</u> is/are allowed.							
6)⊠ Claim(s) <u>28-35 and 38-45</u> is/are rejec	•						
7) Claim(s) <u>36,37,46 and 47</u> is/are object							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
	Evaminar						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
							Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
	by the Laminer. IN	ote the attached Office	Action of formal 1	0-132.			
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim fo a) All b) Some * c) None of:	or foreign priority ur	der 35 U.S.C. § 119(a))-(d) or (f).				
1. Certified copies of the priority d	ocuments have bee	en received.					
2. Certified copies of the priority d	ocuments have bee	en received in Applicati	on No				
3. Copies of the certified copies of	f the priority docum	ents have been receive	ed in this National	Stage			
application from the Internation	al Bureau (PCT Ru	le 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)				•			
1) Notice of References Cited (PTO-892)	0.049)	4) Interview Summary Paper No(s)/Mail Da					
 2) Notice of Draftsperson's Patent Drawing Review (PT 3) Information Disclosure Statement(s) (PTO-1449 or Paper No(s)/Mail Date 		5) Notice of Informal P		D-152)			
<u> </u>							

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DETAILED ACTION

Response to Arguments

Applicant's arguments filed on May 12th, 2005, with respect to claims 15-47 have been fully considered and are persuasive. The previous office action has been withdrawn.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 28 is rejected under 35 U.S.C. 102(b) as being anticipated by Japuntich et al. US
Patent No. 5,509,436. Referring to claim 28, Japuntich discloses a unidirectional fluid valve that
comprises a face mask (10) having at least opening for receiving a unidirectional valve; and a
unidirectional valve that comprises a valve body comprising a valve opening 52; and a valve flap
having a first portion attached to the valve body and an adjacent second portion that seals the
valve opening, wherein the valve flap has a curvature from the first end to the second end when
the valve flap is not attached to the valve body, and further wherein at least a portion of the
curvature of the valve flap is at least partially flattened when the valve flap seals the valve
opening.

Referring to claim 29, Japuntich discloses an apparatus wherein the valve opening is generally planar, and wherein the valve flap curvature biases the valve flap toward the valve

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opening when the valve flap is attached to the valve body to seal the valve opening (Refer to figures 3 and 4 and column 6 lines 33 through 67).

Referring to claim 30, Japuntich discloses an apparatus wherein the valve flap curvature biases the valve flap towards the valve opening to seal the valve opening, and wherein the bias of the valve flap toward the valve opening is sufficient to seal between the valve opening in any orientation of the unidirectional valve (see figures 3 and 4).

Referring to claim 31, Japuntich discloses an apparatus wherein the curvature in the valve flap comprises a constant curvature from the first end to the second end (see figures 3 and 4).

Referring to claim 32, Japuntich discloses an apparatus wherein the curvature in the valve flap varies from the first end to the second end (see figures 3 and 4).

Referring to claim 33, Japuntich discloses an apparatus wherein the facemask is formed of a filtering material (see column 5 lines 10-15).

Referring to claims 34 and 35, Japuntich discloses an apparatus wherein the unidirectional valve is an exhalation/inhalation valve (see column 11 lines 10 through 15).

Referring to claim 38, Japuntich discloses an apparatus that comprises a face mask 10 comprising an opening formed therethrough; and a unidirectional valve located over the opening in the face mask, the unidirectional valve comprising a valve flap 24 attached to the face mask over the opening, the valve flap 24 comprising a curvature from a first end to a second end when the valve flap is not attached to the face mask, wherein the curvature of the valve flap is at least partially flattened when the valve flap seals the opening in the face mask.

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Referring to claim 39, Japuntich discloses an apparatus wherein the at least partially flattened curvature of the valve flap creates a bias that is substantial enough to keep the valve flap sealed over the opening in all orientations (see figures 3 and 4).

Referring to claim 40, Japuntich discloses an apparatus wherein the curvature of the valve flap comprises a constant curvature (see figures 3 and 4).

Referring to claim 41, Japuntich discloses an apparatus wherein the curvature of the valve flap varies from the first end to the second end (see figure 3 and 4).

Referring to claim 42, Japuntich discloses an apparatus wherein the opening is generally planar such that the curvature of the valve flap attached to the face mask over the opening is flattened when the valve flap seals the opening in the face mask (see figure 3 and 4).

Referring to claim 43, Japuntich discloses an apparatus wherein the facemask is formed of a filtering material (see column 5 lines 10-15).

Referring to claims 44 and 45, Japuntich discloses an apparatus wherein the unidirectional valve is an exhalation/inhalation valve (see column 11 lines 10 through 15).

Allowable Subject Matter

Claims 15 through 27 are allowed.

Claims 36, 37, 46 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communication from the examiner should be directed to Nihir Patel whose telephone number is (571) 272-4803. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful the examiner supervisor Henry Bennett can be reached at (571) 272 4791.

NP July 11th, 2005

Herry Sennett
Supervisory Catent Exeminer
Group 3700